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Australia's Health Tracker: Chronic Conditions by Socioeconomic Status

Technical paper

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About us

The Australian Health Policy Collaboration (AHPC), led by the health policy team in the Institute of Health and Sport (IHES) at Victoria University, is a national collaboration of Australia's leading population health and chronic disease experts and organisations. Established in 2014, it brings together leading health organisations and chronic disease experts to translate rigorous research into policy recommendations to prevent and reduce the impact of chronic diseases on the population.

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Acknowledgement of Country

Victoria University acknowledges, recognises and respects the Ancestors, Elders and families of the Boonwurrung, Wadawurrung and Wurundjeri of the Kulin who are the traditional owners of University land in Victoria, and the Gadigal and Guring-gai of the Eora Nation who are the traditional owners of University land in Sydney and the Yugara/Yugarapul people and Turrbal people living in Meanjin (Brisbane).

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Abbreviations

ABS	Australian Bureau of Statistics
AHPC	Australian Health Policy Collaboration
AIHW	Australian Institute of Health and Welfare
DALY	Disability-adjusted life years
IHES	Institute of Health and Sport
IRSD	Index of Relative Socio-economic Disadvantage
LGBTIQA+	Lesbian, gay, bisexual, transgender, intersex, queer, asexual people, or people otherwise diverse in gender, sexual orientation and/or innate variations of sex characteristics
NHS	National Health Survey
NMHC	National Mental Health Commission
NSMHW	National Study of Mental Health and Wellbeing
NSPO	National Suicide Prevention Office
PHA	Population Health Areas
PHIDU	Public Health Information Development Unit
SA2	Statistical Areas Level 2
WHO	World Health Organization
YLL	Fatal burden - years of life lost due to premature mortality
YLD	Non-fatal burden - years of healthy life lost due to disability

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Introduction

This technical paper is a companion and reference tool for *Australia's Health Tracker: Chronic Conditions by Socioeconomic Status* (hereafter referred to as the report card).

The report card has been developed by the Australian Health Policy Collaboration (AHPC), led by the health policy team in the Institute of Health and Sport (IHES) at Victoria University, Melbourne.

The AHPC was established in 2014 with the aim of informing and influencing health and other public policy to embed prevention into the health system and services and into other areas of public policy that directly contribute to or adversely affect good health. The work of the Collaboration since then has provided leadership and consensus-based policy evidence, information and guidance to a whole-of-population approach in policies, funding, institutional arrangements and service models to better prevent and manage chronic diseases in Australia.

Over one-third of the burden of disease in the Australian population could be prevented by reducing modifiable risk factors such as tobacco use and smoking, physical inactivity, poor diets and alcohol consumption[1].

Health disparities within the Australian population are persistent and, overall, are widening, despite policy efforts to address increasing rates of chronic disease[2]. The gap in prevalence between those in the most disadvantaged socioeconomic quintile compared to the least disadvantaged quintile is growing for almost all of the chronic conditions highlighted in the Tracker.

This technical paper summarises the evidence and impacts of socioeconomic disadvantage on health status and chronic disease prevalence.

Scope

Australia's Health Tracker: Chronic Conditions by Socioeconomic Status presents data on Australian communities divided into quintiles by relative socioeconomic disadvantage. It uses the Australian Bureau of Statistics (ABS) Index of Relative Socioeconomic Disadvantage which is compiled from data (on education, family and housing and other characteristics of the population) collected in the Census of Population and Housing[3]. The most disadvantaged quintile is therefore representative of the 20% of Australian communities with the highest levels of socioeconomic disadvantage.

The relationship between socioeconomic status and health is complex. Structural (including policy and culture), individual (such as material, behavioural and psychosocial aspects) and health-system factors all contribute to health inequity[4].

Background

This technical paper discusses the data presented in *Australia's Health Tracker: Chronic Conditions by Socioeconomic Status* report card. This 2024 report card is a new report card in the *Australia's Health Tracker* suite which began in 2016.

Australia's Health Tracker reports on progress against Australian chronic disease prevention targets. The broader suite of Tracker reports includes a range of specific topic Trackers, such as *Australia's Oral Health Tracker, Australia's Mental and Physical Health Tracker* and *Australia's Gender Health Tracker*.

Australia's Health Tracker by Socioeconomic Status report cards present a national-level snapshot of the relationship between socioeconomic status and health. The 2017 and 2021 editions reported on risk factors for common chronic diseases. The 2024 edition spotlights the prevalence of common chronic diseases by socioeconomic quintile. All three editions present premature deaths from chronic disease and suicide by socioeconomic status. These Trackers emphasise that communities experiencing greater levels of disadvantage have higher rates of chronic disease and premature deaths, and poorer health outcomes, than other Australian communities.

Data used for this report

National Health Surveys

The data presented in this report are primarily derived from the National Health Surveys (NHS), a series of Australia-wide health surveys, collected by the ABS. The NHS is designed to collect a wide range of information about the health of Australians, including:

- Prevalence of health conditions
- Prevalence of health risk factors (such as smoking and vaping, alcohol consumption, and physical activity)
- Demographic and socioeconomic characteristics [5].

NHS survey data from the 2004-05 and 2022 survey reports are used in this report.

For ease of understanding in this report, age-standardised rates per 100 population are referred to as percentages.

Mental Health and Wellbeing

The data presented in this report for mental disorders is derived from the 2020 to 2022 National Study of Mental Health and Wellbeing (NSMHW) and the 2007 National Survey of Mental Health and Wellbeing. The data from the 2007 National Survey has been re-derived using updated clinical criteria from the 2020-2022 National Study.

Census

The data for dementia prevalence in this report is sourced from the 2021 Census.

Mortality and suicide rates

Premature mortality by major chronic diseases presented in this report are provided by the Public Health Information Development Unit (PHIDU) at Torrens University. The data are based on the 1987-91, 2009-13 and 2017-21 Cause of Death Unit Record Files supplied by the Australian Coordinating Registry and the Victorian Department of Justice, on behalf of the Registries of Births, Deaths and Marriages and the National Coronial Information System. This is an administrative data set and these results are based on the medically assessed primary cause of death. This data includes every recorded death in the country in the time period.

Socioeconomic data

The 2017 edition, 2021 edition and the 2024 *Australia's Health Tracker: Chronic Conditions by Socioeconomic Status* reports and technical papers use the ABS definition of socioeconomic advantage and disadvantage. Socioeconomic advantage and disadvantage "can be defined as people's access to material and social resources, and their ability to participate in society"[6].

The data presented in this report use the Index of Relative Socioeconomic Disadvantage (IRSD) and data compiled at the Population Health Area (PHA) level. The IRSD summarises information about the economic and social conditions of people within a particular area. The data are presented in quintiles, with each quintile representing, approximately, 20% of the population. IRSD quintiles are often numbered 1 to 5 with the most disadvantaged, labelled quintile 1, through to the least disadvantaged, labelled quintile 5. In contrast, this report follows the **social science convention** of labelling the least disadvantaged quintile as quintile 1 through to the most disadvantaged as quintile 5.

Accordingly, in this report, quintile 1 refers to the approximately 20% of the population living in PHAs[1] with the least disadvantage (few households with low incomes, few people with no qualification and few people in low-skilled occupations). Quintile 5 refers to the approximately 20% of people living in areas with the lowest socioeconomic characteristics (most disadvantaged). An area is classified as most disadvantaged in the IRSD if there are many households with low income, many people with no qualifications and many people in low-skilled occupations[3].

[1] PHAs are a combination of the ABS geographical structures, Statistical Areas Level 2 (SA2), and multiple aggregates of SA2s. SA2s were introduced as a new geographical structure by ABS in 2011, leading to confidentiality concerns and therefore difficulties with representing small area health data. PHIDU constructed PHAs to overcome this issue[7].

Burden of Disease

Burden of disease is recognised as the best method to measure the impact of different diseases or injuries in a population. This report uses outputs from the Australian Burden of Disease Study[7].

Targets for Australia

The AHPC developed national health targets and indicators for the modifiable risk factors that contribute most to preventable chronic disease[8]. Published in 2015 and updated in 2019, the targets aligned with the World Health Organization (WHO) Global Action Plan targets for reduction in preventable chronic disease (non-communicable diseases) by 2025. The WHO has since extended the Global Action Plan to 2030[9].

The AHPC uses 2025 as the target year and 2010 (where necessary 2011) as the baseline year, using the relevant data source. A detailed presentation and discussion of the targets and indicators is available in *Targets and Indicators for Chronic Disease Prevention in Australia*[8].

The AHPC targets are predominantly for chronic disease risk factors and not for disease prevalence. In this report, the targets are only applicable to premature deaths and suicide rates. While the AHPC has a target for diabetes prevalence, it is for a different age bracket than the prevalence data presented in the Tracker and therefore does not apply.

Inequality in Australia

Health disparities within the Australian population are persistent and, overall, are widening[2]. The gap in prevalence between those in the most disadvantaged socioeconomic quintile compared to the least disadvantaged quintile is growing for almost all of the chronic conditions highlighted in the Tracker. Despite multiple initiatives and policies aiming to improve Australian's economic, social and community wellbeing, disadvantage is becoming more entrenched[10,11].

The causes of disadvantage overlap and often people experience multiple forms of disadvantage simultaneously. Intersectionality is the interconnections between race, gender, socioeconomic status and other factors influencing disadvantage[12] and this can amplify the impact of disadvantage[13].

Premature deaths and preventable chronic diseases

This report considers potentially avoidable deaths (30 and 70 years) – premature deaths – from major chronic diseases in relation to socioeconomic status (noting that the Australian Institute of Health and Welfare (AIHW) define premature deaths as before the age of 75).

Preventable deaths and chronic diseases (Table 1) are described and the prevalence data is discussed. Where applicable, the AHPC target is also discussed.

Table 1: Preventable deaths and chronic diseases

Premature mortality
Early deaths from major chronic diseases
Suicide
Chronic diseases
Cancer (malignant neoplasms)
Diabetes
Heart, stroke and vascular diseases
Chronic obstructive pulmonary disease (COPD)
Mental llness (12-month mental disorder)
Dementia

Burden of disease

Burden of disease refers to the loss of healthy life due to injury, illness or premature death[7]. Burden of disease is also referred to as 'disability-adjusted life years (DALY). It is made up of fatal burden, (YLL – years of life lost due to premature mortality) and non-fatal burden (YLD- years of healthy life lost due to disability).

Chronic diseases cause a significant amount of the burden of disease in the Australian population. Sixty-four percent of the burden of disease in 2023 was imposed by five disease groups. These were: cancer; mental health conditions and substance use disorders; musculoskeletal conditions; cardiovascular diseases; and neurological conditions.

Coronary heart disease (5.4%), dementia (4.4%), back pain & problems (4.3%), anxiety disorders (3.9%) and COPD (3.6%) were the 5 leading causes of burden (% or total DALY) in the 2023 Australian Burden of Disease study[7].

Premature mortality

Early deaths from major chronic diseases

Premature mortality is described as deaths that occur **at a younger age than a selected cutoff**. The cutoff age can vary depending on the purpose of the analysis and the population under investigation. In the AHPC's *Targets and Indicators for Chronic Disease Prevention in Australia*, premature mortality is defined as the unconditional probability of dying between 30 and 70 years from cardiovascular diseases, cancer, diabetes or chronic respiratory diseases[8]. This is consistent with the WHO definition of premature mortality[14].

The 5 leading causes of all deaths in Australia in 2021 were coronary heart disease, dementia (including Alzheimer's disease), lung disease, chronic obstructive pulmonary disease (COPD) and cerebrovascular disease. AIHW reports these causes were common among men and women with just variation in the order of occurrence (refer Table 2)[15].

Table 2: Leading underlying causes of death (number of deaths) in Australia, by sex, 2021 [15]

	Men	Women
1	coronary heart disease (10,371)	dementia (including Alzheimer's disease) (10,276)
2	dementia (including Alzheimer's disease) (5,664)	coronary heart disease (6,960)
3	lung disease (4,968)	cerebrovascular disease (5,620)
4	cerebrovascular disease (4,180)	lung disease (3,706)
5	COPD (3,713)	COPD (3,305)

Target for Australia

The target for population health improvement agreed by the AHPC is a 25% reduction in premature mortality from 2010-2025. Table 3 presents the AHPC target and indicators for premature mortality.

Table 3: AHPC target and indicators for premature mortality per 100,000 population (30-70 years old) caused by major chronic disease

Area	Latest Australia Data	AHPC 2025 target	Indicators
Premature mortality	196.88 per 100,000 in 2019-2021 (mortality from cardiovascular diseases, cancer,	166 per 100,000 rate of overall mortality from cardiovascular diseases, cancer, chronic respiratory diseases and diabetes	• Unconditional probability of dying between ages of 30 and 70 years from cardiovascular diseases, cancer, diabetes, or chronic respiratory diseases • Age-standardised rates of unplanned admission for patients

	chronic respiratory diseases and diabetes)	(representing a 25% reduction)	aged between 30 and 70 years admitted to hospital with a primary diagnosis of cardiovascular diseases, cancer, diabetes or chronic respiratory diseases • Age-standardised rates of unplanned readmission for patients aged between 30 and 70 years admitted to hospital with an initial primary diagnosis of cardiovascular diseases, cancer, diabetes, or chronic respiratory diseases

Evidence

In 2021, there were 171,469 deaths registered in Australia, of which 26,967 were identified as potentially avoidable[16].

PHIDU analysis of data for the 2017-21 period shows that 125,334 people aged 30-70 died from cancer, diabetes, circulatory system diseases and respiratory system diseases. People living in the most socioeconomically disadvantaged areas had a higher risk of premature death than the rest of the population.

The proportion of deaths from chronic diseases (cancer, diabetes, circulatory system disease and respiratory system disease) for people aged 30-70 years for each socioeconomic quintile are presented in

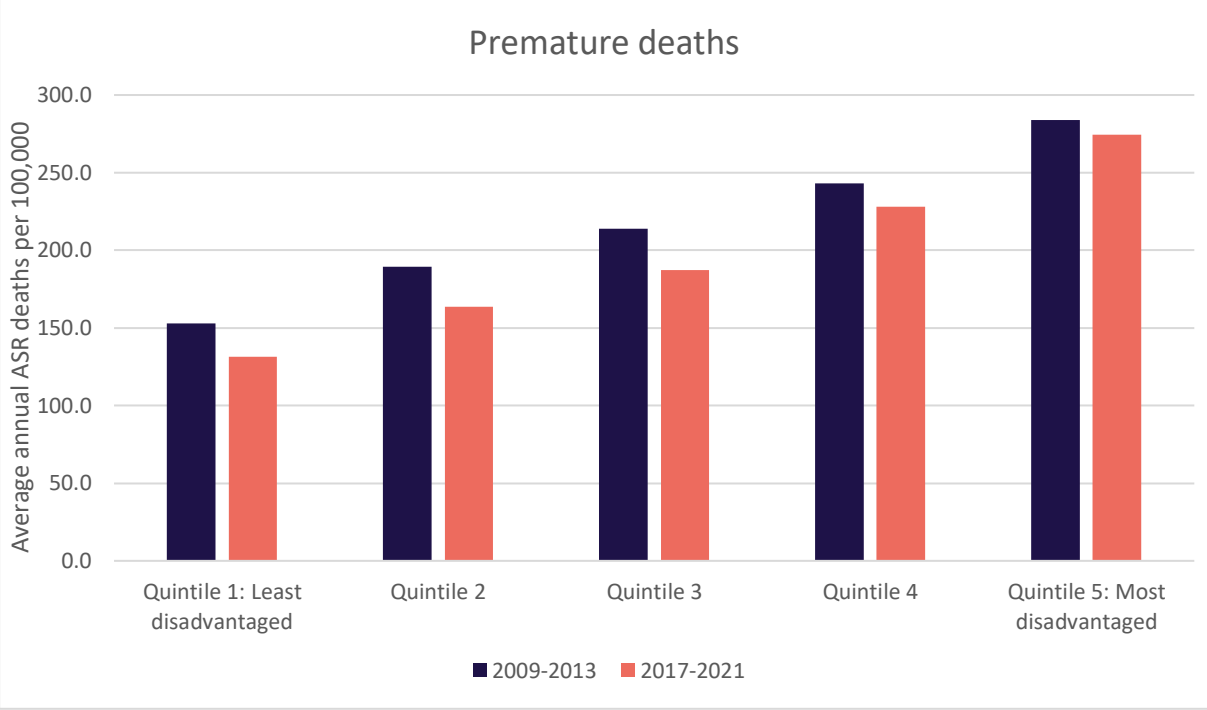

Figure 1: Australian average annual Age Standardised Rate (ASR) per 100,000 population: deaths 30 to 70 years 2009-13 vs 2017-21 by socioeconomic quintile from cancer, diabetes, circulatory system disease and respiratory system disease

Table 4.

The communities in the least disadvantaged group (quintile 1) were reported to have an average age-standardised rate (ASR) of 131.3 premature deaths per 100,000 people in 2017-21, down from 153.0 average ASR premature deaths per 100,000 people in 2009-13. In quintile 5, the most disadvantaged areas, there were 274.6 average ASR premature deaths per 100,000 in 2017-21, down from 283.7 average ASR premature deaths per 100,000 in 2009-13.

Only quintile 1 exceeded (that is, was below) the AHPC target for premature deaths at both time points, with quintile 2 exceeding for the 2017-21 period only. For the 3 quintiles with the lowest socioeconomic status (quintiles 3, 4, 5) the rate of premature deaths was outside of the AHPC target for both time points (Refer to Figure 1 and Table 4).

Premature deaths decreased across all socioeconomic groups between 2009-13 and 2017-21. However, caution should be applied when interpreting this data. During the COVID-19 period of this data (2020-21), there was a decrease in deaths from respiratory conditions such as influenza due to social distancing and hygiene measures [17]. For example, 2 people died from influenza in 2021 [17], considerably lower than the 5-year average of 2015 - 2019 of 403.8 deaths[18]

Additionally, all deaths attributed to COVID-19 are not included in this data. While the majority of COVID-19 deaths occurred in the older age groups (70+ years) not captured in this data, it is still likely to have skewed the data. Individuals who died from COVID-19, particularly those who were younger, were more likely to have comorbid chronic diseases such as chronic lung disease, heart disease, obesity, diabetes and kidney disease[19].

Despite the overall decline in premature deaths, the gap between the most advantaged and the most disadvantaged groups has widened.

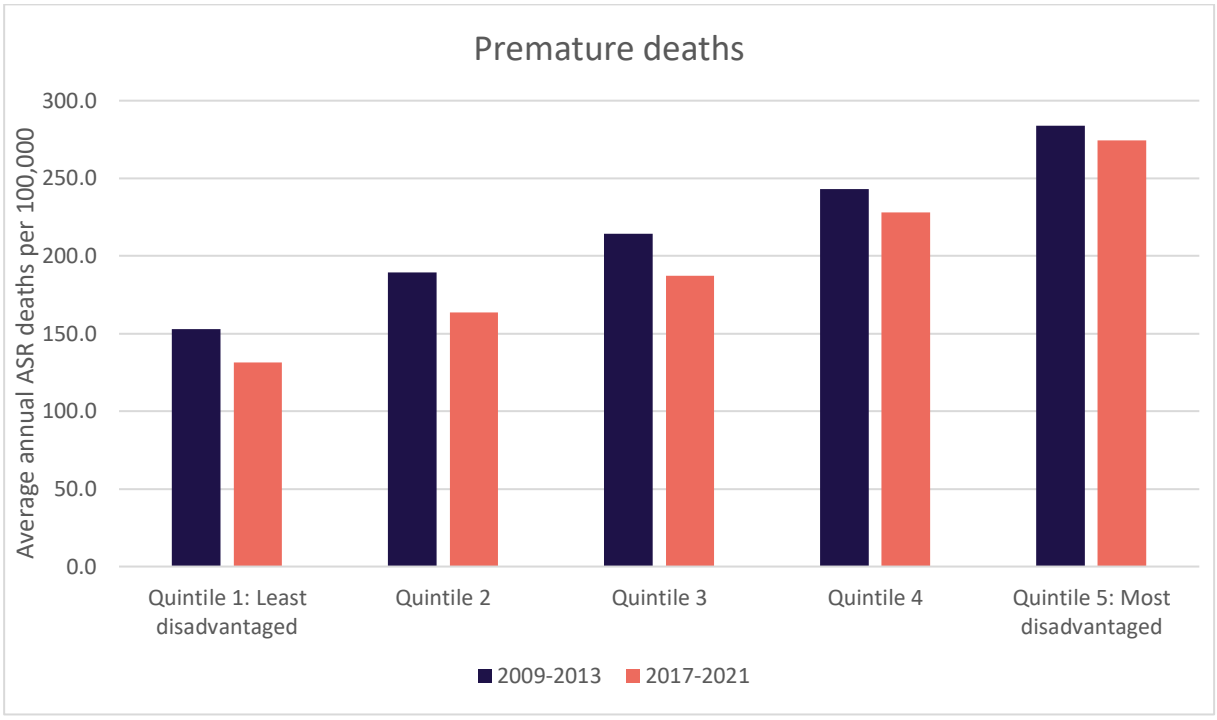

Figure 1: Australian average annual Age Standardised Rate (ASR) per 100,000 population: deaths 30 to 70 years 2009-13 vs 2017-21 by socioeconomic quintile from cancer, diabetes, circulatory system disease and respiratory system disease

Table 4: Australian average annual Age Standardised Rate (ASR) per 100,000 population: deaths 30 to 70 years 2009-13 vs 2017-21 by socioeconomic quintile from cancer, diabetes, circulatory system disease and respiratory system disease

Year	Q 1 (least disadvantaged)	Q 2	Q 3	Q 4	Q 5 (most disadvantaged)	Target
2009-2013	153.0	189.5	214.1	243.2	283.7	166
2017-2021	131.3	163.5	187.1	227.9	274.6	166

Risk factor exposure and health behaviours contribute to the widening of mortality differentials between socioeconomic quintiles groups in Australia[20]. The risk factors for premature mortality, including tobacco use, no or low physical activity and unhealthy diet, are much more prevalent among lower socioeconomic groups[20].

Suicides

Suicidal distress and suicide are complex. The AHPC have monitored rates of suicide based on a historical consensus at the time of establishing the Tracker, that suicide was a key indicator of the mental health of a nation. While mental health can be a significant contributor to suicide, current understanding has evolved to appreciate that there are typically many other factors involved including the social determinants of health and personality, genetic, other clinical and demographic factors[21].

Suicide rates increase with increased socioeconomic disadvantage[22]. Additionally, there are disproportionately high rates of suicide in specific groups. These include First Nations peoples, LGBTIQA+, culturally and linguistically diverse Australians, people with a disability and ex-serving Australian Defence Force members. The National Suicide Prevention Office (NSPO) proposes that 'the root cause of the disproportionate rates of suicide lies in the disparities and inequities in the social and economic circumstances that impact them (specific population groups)"[21]. The suicide statistics therefore, should be interpreted in context with the understanding that differences in rates of suicide between some groups may not reliably indicate the relative prevalence of mental illness.

Suicide rates vary across age categories. In 2019-2021, suicide was the leading cause of death for Australians aged 15-44 and the third leading cause of death for Australians aged 45-64[15].

Target for Australia

The AHPC proposed a target of a 10% reduction in suicides from 2013 to 2020[8]. The target for 2020 was 9.8 per 100,000. On the data available, the average annual rate per 100,000 in 2017-21 was 12.6. With this current data still above, and not meeting the 2020 target, this target was not achieved (refer to Table 5).

Table 5: AHPC target and indicators for suicide rates in Australians (0-74 years)

Area	Latest Australia Data	AHPC 2020 target	Indicators
Suicides	12.6 per 100,000 in 2017-2021	Reduction in the national suicide rate by 10% by 2020, to 9.8 per 100,000.	• Number of suicide deaths per year per 100,000 population. • The suicide rate as an age standardised rate per 100,000 population.

Evidence

There is a gap between the suicide rates in the high and low socioeconomic areas. In the 2017 - 21 period, the lowest socioeconomic areas (quintile 5) had an average annual ASR suicide prevalence of 16.0 per 100,000 while in the high socioeconomic areas, the rate was lower with 9.5 per 100,000. From this analysis, only the least disadvantaged quintile (quintile 1) was under the target rate set by the AHPC. This gap between the most and least disadvantaged quintiles is widening over time. While almost all socioeconomic quintiles had a decrease in suicide rates over time, the reduction was greater in areas of higher socioeconomic status when compared to the 1987-91 data.

Figure 2 and Table 6 display suicide rates by socioeconomic quintile in 1987-91 compared to 2017-21.

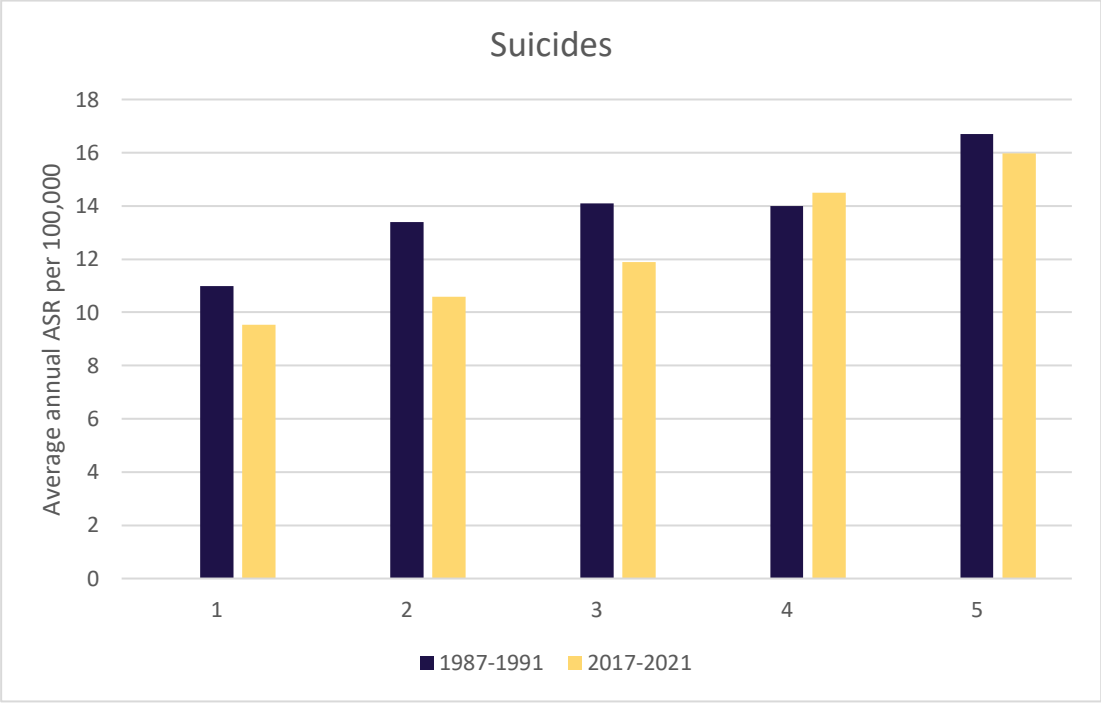

Figure 2: Suicide average annual ASR per 100,000 population (all ages), by socioeconomic quintile

Table 6: Suicide average annual ASR per 100,000 population (all ages), by socioeconomic quintile

Year	Q 1 (least disadvantaged)	Q 2	Q 3	Q 4	Q 5 (most disadvantaged)
1987-1991	11.0	13.4	14.1	14.0	16.7
2017-2021	9.5	10.6	11.9	14.5	16.0

Chronic disease

Cancer

Cancers are diseases where body cells mutate and multiply uncontrollably, invading and damaging the cells around them. Cancer can also spread to other parts of the body by blood and lymphatic systems. Risk factors vary for different types of cancer but can include tobacco use, overweight and obesity, diabetes, poor diet, alcohol use and physical inactivity among others. Occupation, high sun exposure and air pollution can also be risk factors for cancer[23].

Evidence

The NHS estimates include people who had cancer expected to last for six months or more (including cancer in remission).The NHS reports that 1 in 50 people (456,200) had cancer in 2022. Males were slightly more likely than females to have cancer. Cancer incidence increases with age with the highest prevalence in the over 75 age group[24].

Figure 3 and Table 7 display cancer prevalence by socioeconomic quintile in 2004-05 compared to 2022.

In 2004-05, the distribution of cancer (malignant neoplasms) across socioeconomic quintiles was varied with the highest rates occurring in quintile 2 (second least disadvantaged quintile) and quintile 4 (second most disadvantaged quintile). The most disadvantaged quintile had lower cancer rates (1.5%) than the least disadvantaged in 2004-05 (1.6%).

In 2022, the most disadvantaged quintile reported the highest rates of cancer (2.3%) with an increase from 2004-05 levels. Meanwhile, the least disadvantaged quintile reported the lowest cancer rates (1.2%) with a decrease in cancer incidence.

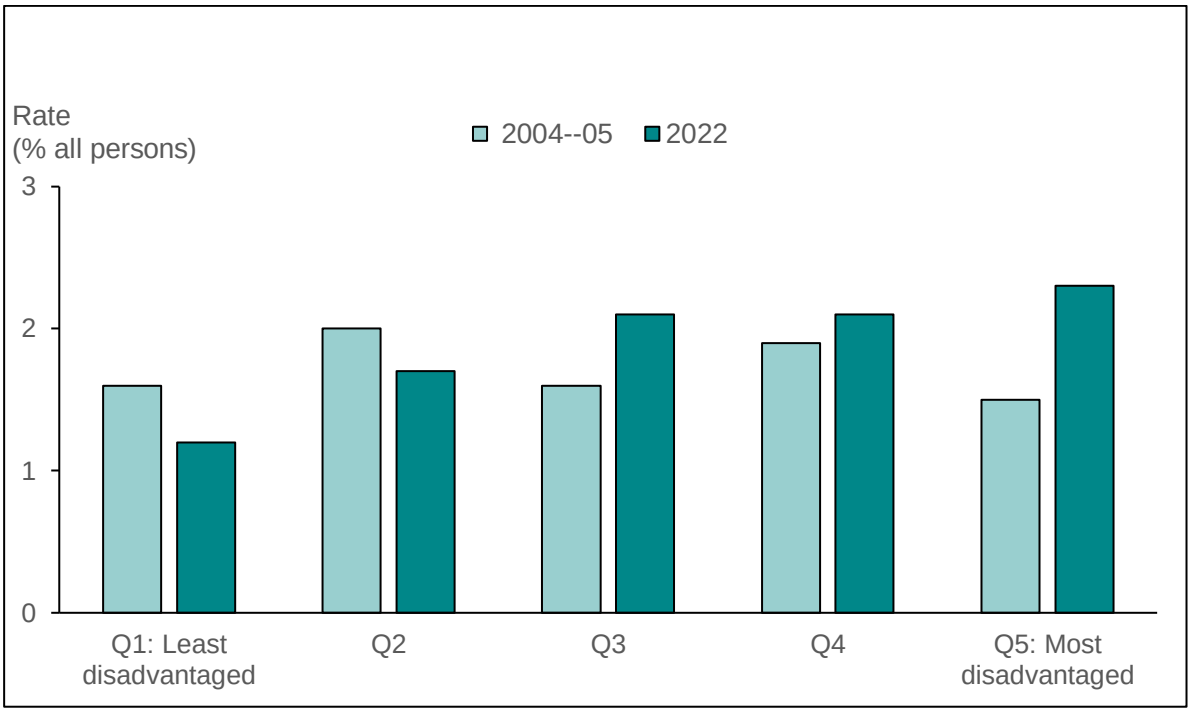

Figure 3: Percentage all persons with cancer (malignant neoplasms) in 2004-05 and 2022, by socioeconomic quintile

Table 7: Percentage all persons with cancer (malignant neoplasms) in 2004-05 and 2022, by socioeconomic quintile

Year	Q 1 (least disadvantaged)	Q 2	Q 3	Q 4	Q 5 (most disadvantaged)
2004-05	1.6	2.0	1.6	1.9	1.5
2022	1.2	1.7	2.1	2.1	2.3

Diabetes

Diabetes is a chronic disease characterised by high blood sugar (glucose) levels. Diabetes is a risk factor for many other conditions including kidney disease, heart attacks (myocardial infarction), blindness and stroke. Diabetes prevalence increases with age. There are three main types: type 1, type 2 and gestational diabetes[25].

Diabetes prevalence in the 2022 NHS includes Type 1, Type 2 and type unknown. It includes people who reported they had diabetes mellitus but that it was not current at the time of interview. Type 1 and type 2, included in the NHS survey are explained below.

Type 1 diabetes

Type 1 diabetes is an autoimmune disease in which the pancreas makes little or no insulin, the hormone responsible for allowing sugar to enter cells to make energy. The cause of type 1 diabetes is unknown but it is thought to be the result of interactions between genetics and environmental factors. Type 1 diabetes commonly develops before age 30 but can be diagnosed at any age. There is no cure for type 1 diabetes and treatment involves insulin replacement and lifestyle factors management including diet, exercise and glucose management[25].

Type 2 diabetes

In type 2 diabetes the body becomes resistant to insulin and the pancreas subsequently loses the ability to produce insulin. The cause of type 2 diabetes is unknown but there are strong genetic risk factors as well as associations with modifiable lifestyle risk factors. Risk factors include poor diet, physical inactivity, smoking and obesity[25]. It typically develops over the age of 45 but onset is occurring more frequently in younger people. There is no cure for type 2 diabetes but progression of the disease can be slowed or halted by diet changes and increased exercise. In some cases, medications or insulin replacements are required in addition to lifestyle changes to manage the condition[26].

Evidence

In 2022 the NHS reported that 1 in 20 Australians of all ages (5.3%) were estimated to have diabetes (type 1, type 2 and type unknown)[27]. Males and females had similar rates and diabetes was the seventh leading cause of death in Australia in 2022.

In 2022, the prevalence of diabetes was significantly higher in the quintiles of greater disadvantage, with the rate in the most disadvantaged quintile (8.6%) almost 3 times greater than the least disadvantaged quintile (3.1%). Since 2004-05, the gap in diabetes rate between the lowest and highest socioeconomic quintiles has widened, with the lowest

quintile seeing a much sharper prevalence increase. Figure 4 and Table 8 display diabetes prevalence by socioeconomic quintile in 2004-05 compared to 2022.

Note: The 2022 NHS estimates include persons who reported they had diabetes mellitus but that it was not current at the time of interview. The 2004-05 diabetes mellitus data excludes persons who reported non-current diabetes mellitus. Care should be taken when attempting to compare this data with data from other NHS years which may include persons who reported non-current diabetes mellitus.

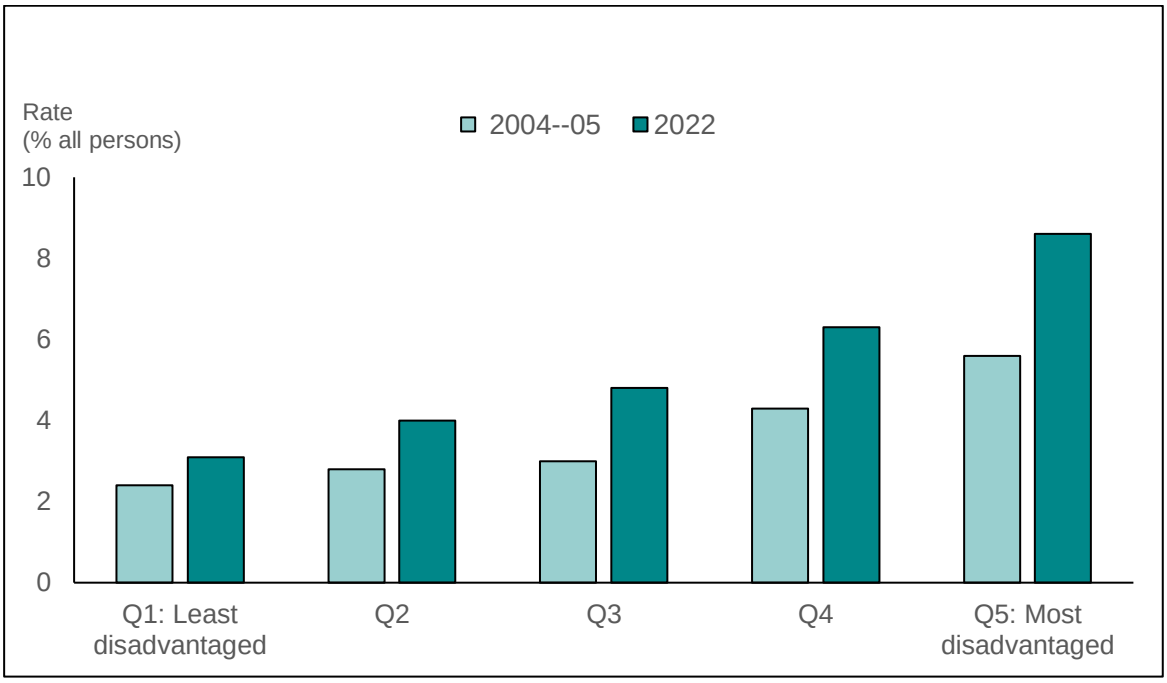

Figure 4: Percentage all persons with diabetes in 2004-05 and 2022, by socioeconomic quintile

Table 8: Percentage all persons with diabetes in 2004-05 and 2022, by socioeconomic quintile

Year	Q 1 (least disadvantaged)	Q 2	Q 3	Q 4	Q 5 (most disadvantaged)
2004-05	2.4	2.8	3.0	4.3	5.6
2022	3.1	4.0	4.8	6.3	8.6

Heart, stroke and vascular disease

Heart, stroke and vascular disease is the nationally recognised category for different diseases that affect the heart and blood vessels[28].

Heart, stroke and vascular disease prevalence estimates collected in the NHS include angina, heart attack, other ischaemic heart disease, stroke and other cerebrovascular disease, oedema or heart failure and diseases of the arteries, arterioles and capillaries. The estimates include persons who reported they had angina, heart attack, other ischaemic heart diseases, stroke and other cerebrovascular diseases or heart failure but that these conditions were not current at the time of interview[29]. The major heart, stroke and vascular disease conditions are briefly explained below.

Risk factors for heart, stroke and vascular disease include smoking, high blood pressure, diabetes, overweight and obesity and abnormal blood lipids[28].

Ischaemic heart diseases (angina, heart attack and other ischaemic heart diseases)

Heart attack or acute myocardial infarction is a sudden blockage in a blood vessel supplying the heart. It can damage heart muscle and heart functions and is potentially life-threatening. Angina is chest pain caused by reduced heart blood flow[28].

Cerebrovascular diseases (stroke and other cerebrovascular diseases)

A stroke is when a blood vessel supplying the brain is either blocked (ischaemic stroke) or ruptures (haemorrhagic stroke). It may lead to a part of the brain dying and subsequent impairment. Stroke can also be fatal[28].

Heart failure

Heart failure is usually a progressive condition where the heart function becomes less effective. It can result from conditions such as heart attack, high blood pressure, cardiomyopathy or damaged heart valves[28].

Evidence

The NHS reports that 1 in 20 people (1.3million) had heart disease, stroke or vascular disease in 2022, with a slightly higher proportion of males than females[29].

In 2022, rates of heart disease, stroke and vascular disease in the most disadvantaged quintile (8.2%) were more than double that of the least disadvantaged quintile (3.6%). Since 2004-05, the prevalence gap for heart disease, stroke and vascular disease has increased in all socioeconomic quintiles. The gap between the lowest and highest socioeconomic status communities has widened, with a much larger increase observed in the most disadvantaged quintile (5.2% to 8.2 %) than in the least disadvantaged quintile (2.7% to 3.6%).

Figure 5 and Table 9 display heart, stroke and vascular disease prevalence by socioeconomic quintile in 2004-05 compared to 2022.

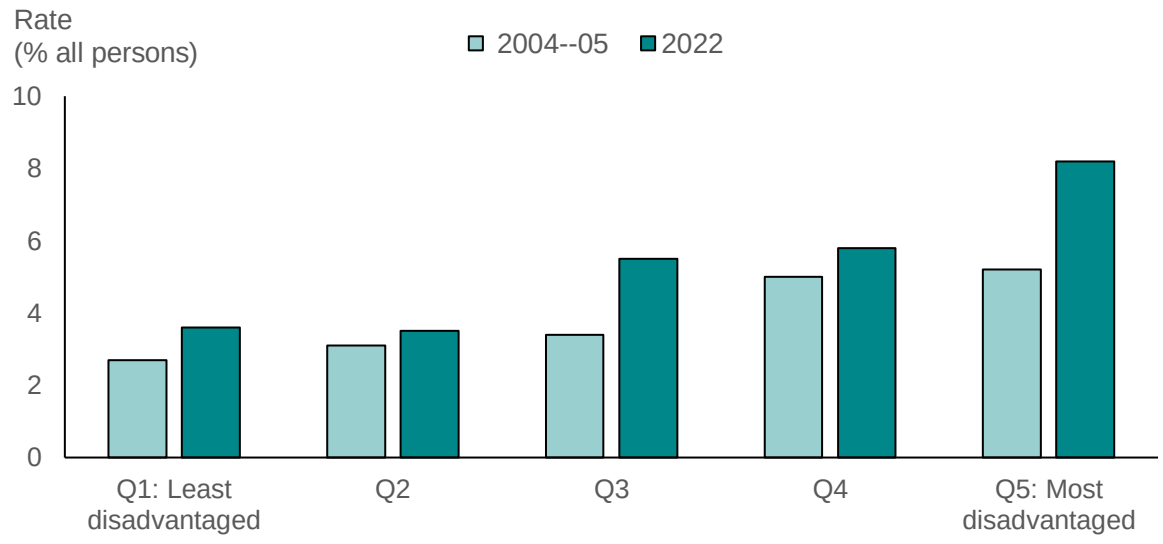

Figure 5: Percentage all persons with heart, stroke and vascular disease in 2004-05 and 2022, by socioeconomic quintile

Table 9: Percentage all persons with heart, stroke and vascular disease in 2004-05 and 2022, by socioeconomic quintile

Year	Q 1 (least disadvantaged)	Q 2	Q 3	Q 4	Q 5 (most disadvantaged)
2004-05	2.7	3.1	3.4	5.0	5.2
2022	3.6	3.5	5.5	5.8	8.2

Chronic Obstructive Pulmonary Disease (COPD)

COPD is the umbrella term for respiratory conditions including emphysema, chronic bronchitis and chronic asthma. In the NHS, asthma is excluded and reported on separately. Therefore in the NHS COPD is considered to be bronchitis and emphysema[30].

COPD is characterised by chronic obstruction of lung airflow by narrowing of the bronchial tubes that makes breathing difficult[31]. With emphysema, the alveoli of the lungs, the small sacs where oxygen exchange between the lungs and blood, are damaged[32]. In chronic bronchitis, inflammation of the airways produces phlegm (mucus) and a chronic cough[33].

Risk factors for COPD include smoking or tobacco smoke exposure, environmental factors and other chronic conditions such as asthma[31]

The COPD prevalence estimates collected in the NHS include bronchitis and emphysema.

Evidence

The NHS reports that the highest prevalence of COPD is in the 65 years and older age group with 1 in 14 people in this age group having COPD[30].

In 2022, COPD prevalence in the most disadvantaged quintile was over three times greater than in the least disadvantaged quintile. Between 2004-05 and 2022, the prevalence of COPD has increased in the most disadvantaged quintile (3.8% to 4.7%) but decreased in the other four quintiles.

Figure 6 and Table 10 display COPD prevalence by socioeconomic quintile in 2004-05 compared to 2022.

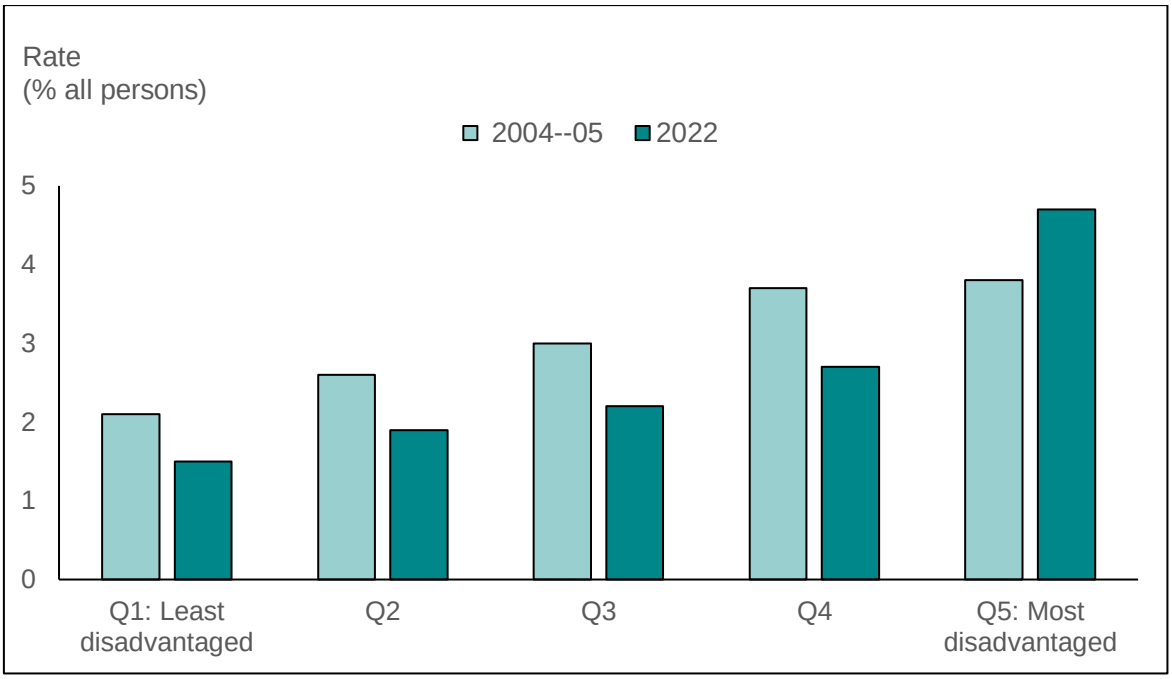

Figure 6: Percentage all persons with COPD in 2004-05 and 2022, by socioeconomic quintile

Table 10: Percentage all persons with COPD in 2004-05 and 2022, by socioeconomic quintile

Year	Q 1 (least disadvantaged)	Q 2	Q 3	Q 4	Q 5 (most disadvantaged)
2004-05	2.1	2.6	3.0	3.7	3.8
2022	1.5	1.9	2.2	2.7	4.7

Mental illness (12-month mental disorders)

Three groups of mental health conditions (referred to as mental disorders) were collected in the NSMHW. These were based on the WHO International Classification of Diseases, Tenth Revision (ICD-10) definitions and criteria.

- Anxiety disorders:
  - Panic Disorder, Agoraphobia with/without Panic Disorder, Social Phobia, Generalised Anxiety Disorder, Obsessive-Compulsive Disorder, and Post-Traumatic Stress Disorder.
- Affective disorders:
  - Depressive Episode (which includes Minor Depressive Episode, Moderate Depressive Episode and Major Depressive Episode), Dysthymia, and Bipolar Affective Disorder.
- Substance Use disorders:
  - Harmful Alcohol Use, Alcohol Dependence, Harmful Drug Use and Drug Dependence.

Evidence

The trend in mental illness prevalence is in contrast to most other chronic diseases presented in the Tracker. In the 2020-22 period, the prevalence of mental illness was highest

in the most disadvantaged quintile (22.6%). However, since 2007, the least disadvantaged quintile has seen the largest rise in prevalence (15.7% to 20.4%). While prevalence is increasing across the socioeconomic quintiles, the gap in prevalence between the least and most disadvantaged quintiles is narrowing.

An increase in mental illness in young people, particularly females is driving mental health increases. In 2007, 26% of people in the 16-24 age group had a 12-month mental illness; in 2020–22, this had grown to 39%. Females aged 16-24 years had a much larger increase than males in this time with an increase to 46% in 2020-22 from 30% in 2007. In the same time-period, the prevalence of mental illness in males aged 16-24 years increased from 23% to 32%[34].

Figure 7 and Table 11 display mental illness prevalence by socioeconomic quintile in 2004-05 compared to 2022.

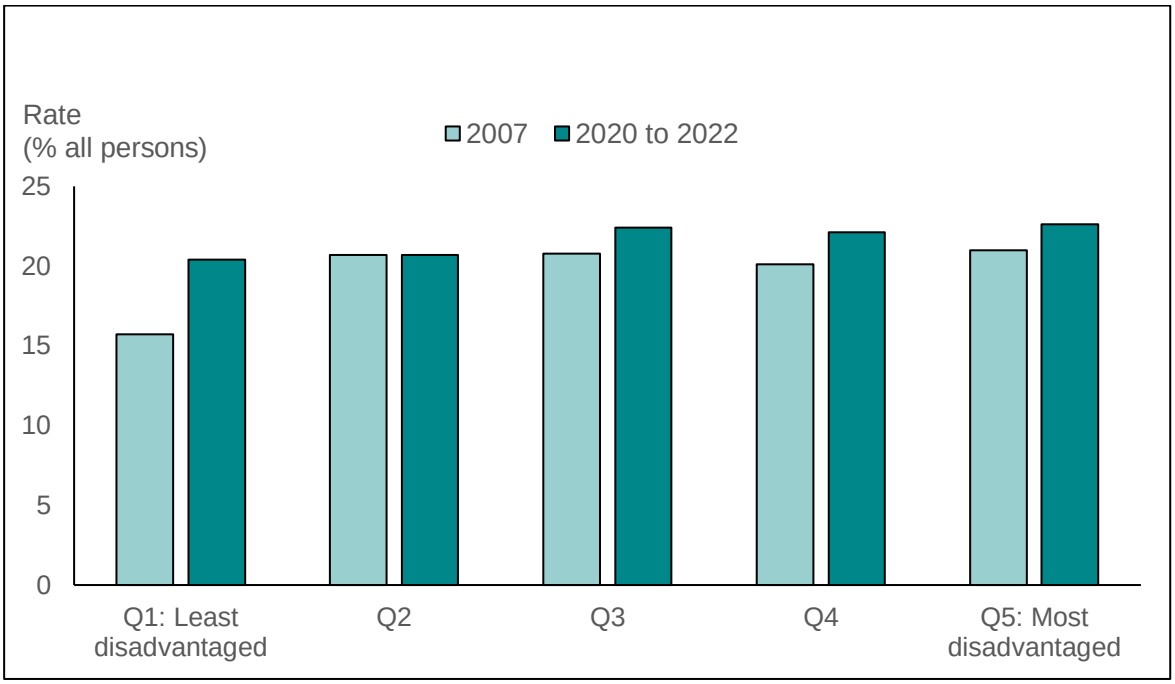

Figure 7: Percentage all persons with 12-month mental disorder in 2007 and 2020-22, by socioeconomic quintile

Table 11: Percentage all persons with 12-month mental disorder in 2007 and 2020-22, by socioeconomic quintile

Year	Q 1 (least disadvantaged)	Q 2	Q 3	Q 4	Q 5 (most disadvantaged)
2004-05	15.7	20.7	20.8	20.1	21.0
2022	20.4	20.7	22.4	22.1	22.6

Dementia

Dementia is a group of conditions or disorders affecting the brain. They are characterised by gradual impairment of brain function including memory, speech, cognition, personality, behaviour and mobility[35].

Dementia typically affects people over 65 years but onset can occur in younger people. The causes of dementia are varied and can be hereditary. Risk factors for dementia include obesity, smoking, high blood pressure, depression and diabetes. High levels of education, physical activity and social engagement are protective against dementia development[35].

There is no cure for dementia and the condition typically progresses to a significant decline in the functional ability and quality of life of the individual who then requires substantial care[35].

Evidence

In 2021, the gap in prevalence for dementia between the most and least disadvantaged quintiles was less stark than for other chronic diseases, but rates were still highest in the two most disadvantaged quintiles (0.8%) compared to the least disadvantaged quintile (0.7%). Dementia rates increase significantly with age. Population prevalence of dementia reported through the 2021 Census data was only 0.7% but was much higher in the oldest age groups of 80-89 years (9.2%), 90-99 years (19%) and 100+ years (25.2%).

Figure 8 and Table 12 display dementia prevalence by socioeconomic quintile in 2021. There is no trend data available for dementia.

Note re data: "The population coverage of the Australian census (2021) is near complete, and the concordance of self-reports and proxy measures of dementia with clinical diagnoses is reasonable. The lower estimates of dementia prevalence based on the 2021 census and the NPS MedicineWise survey are plausible"[36(p321)].

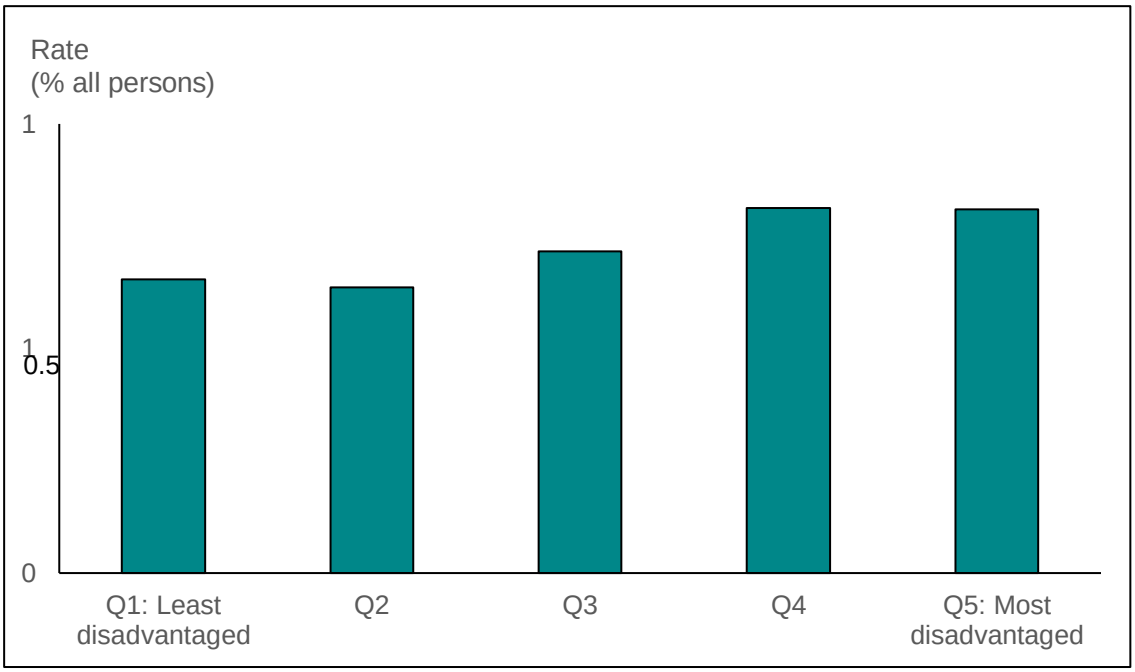

Figure 8: Percentage all persons with dementia in 2021, by socioeconomic quintile

Table 12: Percentage all persons with dementia in 2021, by socioeconomic quintile

Year	Q 1 (least disadvantaged)	Q 2	Q 3	Q 4	Q 5 (most disadvantaged)
2021	0.7	0.6	0.7	0.8	0.8

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